EasyPlus

Self-Monitoring Blood Glucose System

User's Manual

Please read this User Manual thoroughly before using your blood glucose monitor.

Dear EasyPlus SMBG System Owner,

Thank you for using the **EasyPlus** Self-Monitoring Blood Glucose (SMBG) System. We design this system for medical care on diabetes. The test results can help you determine the effects of food, exercise and diabetes medications. We design this system to be dependable, easy-to-use, compact, and lightweight and portable to help you monitor your blood glucose on a regular basis.

This manual will help you get the most from your EasyPlus SMBG System.

To start testing quickly, you can also refer to the Quick Reference Guide.

If you have questions, please call the EasyPlus Customer Care Service toll-free at 1-888-216-5888 to get our help. We offer assistance from Monday to Friday, 9:00AM to 5:00PM. You can also visit www.epsbio.com.tw for diabetes management tools and product demonstrations.

Thanks again for choosing the EasyPlus blood glucose meter.

EasyPlus SMBG System

Your new EasyPlus Blood Glucose meter and accessories work together to measure the amount of glucose in your blood. The system includes:

- **Wallet**
- **User Manual**
- **Self-Test Log Book**
- **Warranty Card**
- **EasyPlus Blood Glucose Meter**
- **Test Strip Instructions**
- **Control Solution Instructions**
- **Lancing device**
- **EasyPlus Blood Glucose Test Strips (10 pcs)**
- **EasyPlus Normal Control Solution**
- **Check Strip**
- **Code Card**
- **Quick Installation Guide**
- **2 Alkaline Batteries 1.5V (AAA)**
- **Lancets (10 pcs)**

Why is it so important to test blood glucose regularly?

Testing your blood glucose regularly can make a big difference in how you manage your diabetes every day. We've made this SMBG system as simple as possible and help you to use the meter regularly.

Do you need Help?

If you have questions, please call the Customer Care Service Center toll-free:1-888-216-5888. You can also visit www.epsbio.com.tw for diabetes management tools and product demonstrations.

Note:

Although the EasyPlus SMBG System is easy to use, you may need to consult your healthcare professional (this may be your doctor, pharmacist or diabetes nurse educator) for instructions on how to use the system. Only the correct use of the system will ensure accurate results.

Important Information About Your New Meter

- EasyPlus blood glucose meter is designed and approved for testing fresh capillary whole blood samples from fingerstick. The meter is for outside the body (in vitro) use. It should not be used to diagnose diabetes.
- EasyPlus blood glucose meter only use with EasyPlus Blood Glucose Test Strips. Other test strips will give inaccurate results.
- Testing is not valid for neonatal blood specimen.
- Do not disassemble the meter as this may cause damage to the components resulting in incorrect reading. Disassembling the meter will also void the warranty.
- Protect the meter from direct sunlight to ensure a longer lifespan.
- You should not store the meter and test strips in a car, a bathroom or a refrigerator.
- Keep the meter, test strips and lancing device away from children and pets.
- You should not test critically ill patients with home-use blood glucose meters.
- Elevated levels of acetaminophen, uric acid, gentisica acid, levodopa, dopamine and methyldopa may affect results.

Health-Related Information

- If you are very dehydrated or urinating frequently, you may get a test result that is lower than what your blood glucose really is. If you think you are dehydrated, call your doctor right away.
- If you have followed the steps in the user's manual, but still have symptoms that don't seem to match your test results, or if you have questions, please talk to your doctor.
- Please read your test strip instruction carefully for additional health-related information.

Warning for potential biohazard:

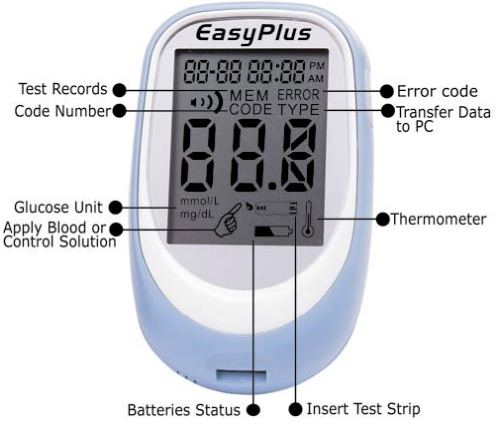
Healthcare professionals using this system on multiple patients should handle all products or objects in contact with human blood carefully to avoid transmitting viral disease, even after cleaning.

Content

Chapter 1: Understanding Your Meter 9
The EasyPlus Blood Glucose Meter 9
Checking Your System 11
Coding Your Meter 12
Setting The Time And Date.....13
Using EasyPlus Blood Glucose Test Strips.....15
Chapter2: Control Solution Test.....16
Why Run A Control Solution Tests.....16
About The Control Solutions.....17
Running A Control Solution Test.....18
Understanding Control Test Results.....21
Chapter 3: Testing Your Blood Glucose.....23
Inserting A Lancet into the Lancing Device.....23
Running A Blood Glucose Test With Blood From Your Fingertip.....27
Discarding Used Lancets.....30
Understanding Your Test Results.....31
Unusual Test Results.....32
Chapter 4: Meter Memory, Setup.....33
Memory, Storing Test Result.....33

Viewing &Deleting Test Results.....34
Meter Setup.....35
Setting Thermometer.....36
Setting The Alarm.....37
Setting The Beeper For The Alarm.....38
Setting The Clock.....39
Chapter 5: Maintenance And Troubleshooting.....40
Installing Batteries.....40
Cleaning Your Meter 42
Cleaning Your Lancing Device.....42
Screen Messages And Troubleshooting.....43
Chapter 6: Technical Information.....47
Specifications.....47
Comparing Your Meter Result To A Lab Result.....48
Device Information..... 49
Additional Supplies.....50
Warranty.....50

Chapter 1: Understanding Your Meter
The EasyPlus Blood Glucose Meter

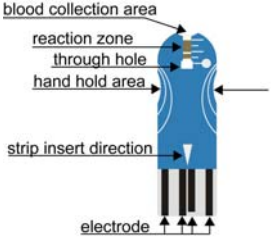


M Button
To turn on the meter or read records.

S Button
To turn on the meter or go into Setting Mode.

USB Port
To transfer data to a Computer.

Strip Slot
To insert test strip, check strip or code card.



FRONT

BACK

Test Strip Vial

Checking Your System

A new check strip is included with your meter.

1. Make sure your check strip is inserted. The meter will turn on automatically.

2. The screen displays “OK”.

3. Remove the check strip and the meter will turn off automatically. Store the check strip in a safe place.

Coding Your Meter

A new Code Card is inside each new box of test strips. Code your meter every time you open a new box of test strips.

1. The LCD display will show “no CODE” the first time batteries are installed.

2. Insert the code card into the slot. The screen displays “OK”.

3. The code number will be shown on the LCD. Make sure the code number on the LCD matches the code number on the test strip vial.

Note:

Do not discard the code card until you use all test strips in the same vial.

Setting The Time and Date—First Time Use

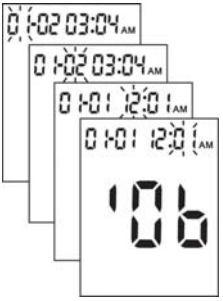
Setting the current time and date in your meter is important if you use the meter memory or if you want to download your results to a computer.

1. Press and hold the “S” button until turning the meter on. Press ”S” button and release to enter setting mode.

2. The time and date appear on the display. The year flashes at the center of the LCD display.

3. Press ”M” button to adjust the year. Press and hold “M” button to scroll faster.

4. Press and release ”S” button to set the year. The month will then flash.



5. Repeat step 3 and 4 to set the date, hour, and minute. The flashing field is the one you are setting.

6. Press the “S” button to confirm the setting. The display will show “SCL” and the unit of measurement. Press the “S” button again, to go to screen shown in Step 1. Press and hold “S” for more than 3 seconds, and the meter will turn off.

Using EasyPlus Blood Glucose Test Strip

- Use only with EasyPlus Blood Glucose Meter.
- Code your meter and run a control test every time you open a new box of test strips (See Chapter 2 “Control Solution Testing.”)
- Keep the test strips in their original vial.
- Close the vial tightly right after you take a test strip out. This helps keeps the test strip dry.
- Use the test strip within three minutes after you take it out of the vial.
- The strip is for single use only. Do not reuse it.
- Record the date you open the test strip vial. Be sure to check the “Use by” date on the test strip vial. The test strip is good for three months from the date the vial is opened or until the “Use by” date on the vial, whichever comes first.
- Store the test strip vial and your meter in a cool dry place.
- Store the test strips below 86˚F(30˚C). Do not freeze.
- Do not apply blood or control solution to the test strip before you insert it into the meter.
- Do not touch the test strip with wet hands. Do not bend, cut, or twist the test strips.

Chapter 2: Control Solution Testing

Why Run A Control Solution Test

Running a control test lets you know that your meter and test strips are working properly to give reliable results. You should run a control test when:

- You use the EasyPlus Blood Glucose Meter for the first time.
- You open a new vial of test strips.
- You think the meter or test strips may be working incorrectly.
- You drop the meter.
- You have repeated a test and the test results are still lower or higher than expected.
- You are practicing the test procedure.

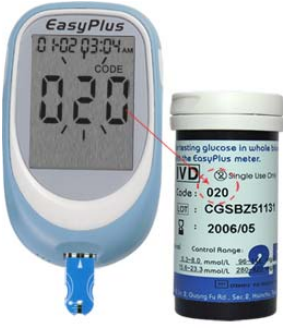
Note:
Professional users are instructed to follow federal, state, and local guidelines concerning QC practices.

About The Control Solution

- Use only with EasyPlus test strips.
- Write the date you opened the bottle on the bottle label. The control solution is good for three months from the date the vial is opened or until the “Use by” date on the bottle, whichever comes first.
- Do not uses control solution that is past the “Use by” date.
- Close the bottle tightly after every use.
- Left over control solution should not be added back into the control bottle.
- Store the bottle of control solution at room temperature, below 86°F (30°C). Do not freeze.

Running A Control Solution Test

You need the meter, a test strip, and control solution



1. Put a test strip into the meter in the direction of the arrow. The meter turns on. Make sure the code number on the display matches the code number on the test strip vial.

2. If you miss seeing the code number, take the test strip out and reinsert it into the meter. After LCD shows the code number, you will see the screen shown above.

3. Place the meter on a flat surface, like a table.

4. Remove the control solution bottle cap and wipe the tip of the bottle with a tissue.

5. Squeeze the bottle until a tiny drop forms at the tip of the bottle. Touch the drop to the Blood collection area at the end of the test strip. **Do not put control solution on top of the test strip.** When you hear the beeper, you have enough control solution in the test strip. The meter starts to count down from 5 seconds and will show the results.

6. A result appears on the display. Don't remove the test strip yet. Check if the reading falls within the range printed on the test strip vial.

7. Remove the test strip and throw it away after you have compared the reading to the range printed on the test strip vial.

Understanding Control Test Results

The label on your test strip vial shows the acceptable ranges for the Control Solutions. The result you get should be inside this range. Make sure you compare the result to the correct level of control.

	Acceptable Control Ranges
Normal Control	96- 144 mg/dL
High Control	280-420 mg/dL

When the control result is inside the range on the test strip vial, your test strips and your meter is working properly.

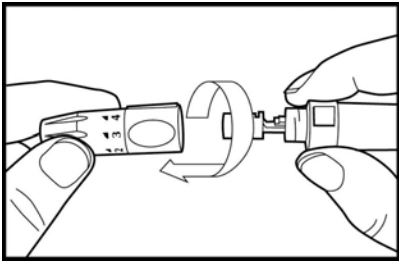
If your control result is not inside the acceptable range (printed on your test strip vial), here are some things you can do to solve the problem:

Troubleshooting Checks	***Action***
✓ Was the test strip exposing to open air for a long period of time?	Repeat the control test with properly stored strips.
✓ Was the test strip vial capped tightly?	This will humidify strips inside. Replace the test strips.
✓ Did the code number on the meter display match the code number on the test strip?	If they do not match, insert the correct code card in the meter and try again.
✓ Was the meter functioning well?	You can use the check strip to verify the meter's functions.
✓ Is the control solution expired or contaminated?	Replace with new control solution to check the performance of SMBG system.
✓ Were test strips and control solutions stored in cool, dry places?	Repeat the control test with properly stored strips or control solutions.
✓ Did you follow the testing steps properly?	Read Chapter 2 "Control Solution Testing" again and retest again. If you still have problems, call the our Customer Service Toll Free: 1-888-216-5888

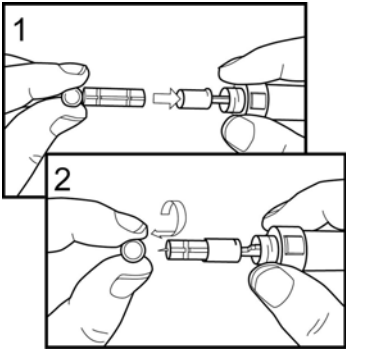
Chapter 3: Testing Your Blood Glucose

Inserting A Lancet Into The Lancing Device

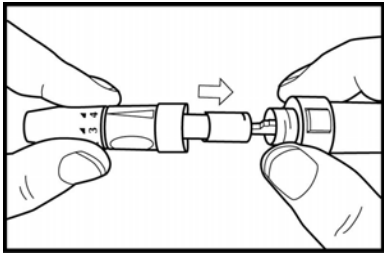
You must first load the lancet into the lancing device to get it ready for use.



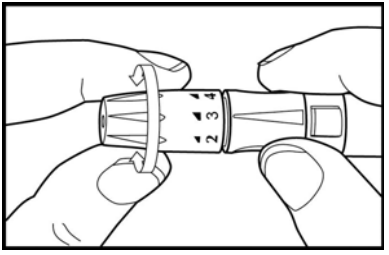
1. Unscrew the Cap.



2. Insert the lancet into the lancing device firmly then twist off the protective cover.

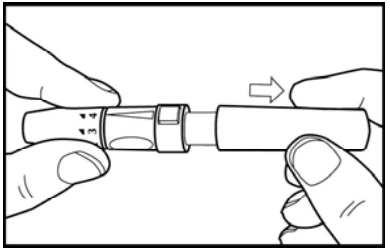


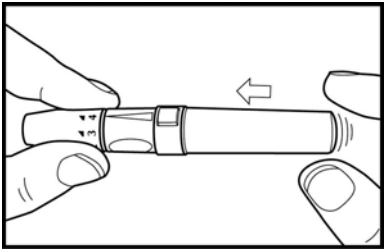
3. Recap the front cap.



4. Select the desired penetration depth.

Note:
Select 1-2 for soft or thin skin. 3 for average. 4-5 for thick or calloused skin.





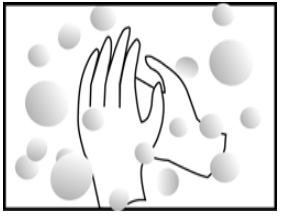
5. Pull on the sliding barrel of the lancing device until it clicks and then release. Now the lancing device is ready. Do not prick your finger until your meter and strip are prepared.

6. Set the lancing device aside until later in the test.

Notes

- The best depth setting is the lowest number that draws enough blood for a test. Try different settings to find the one that's right for you.
- Please do not share your lancing device with anyone. And always use a new, sterile lancet. Lancets are for one time use only.
- Used Test strips and Lancets are considered bio-hazardous waste in accordance with U.S. local regulations and should be handled as if capable of transmitting infection. The users may discuss methods for disposing of used test strips and lancets with their doctor.

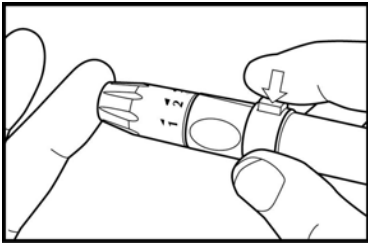
Running A Blood Glucose Test With Blood From Your Fingertip



1. Wash your hands with soap and warm water. Rinse and dry thoroughly.

2. Put a test strip into the meter in the direction of the arrow. The meter turns on. Make sure the code number on the display matches the code number on the test strip vial.

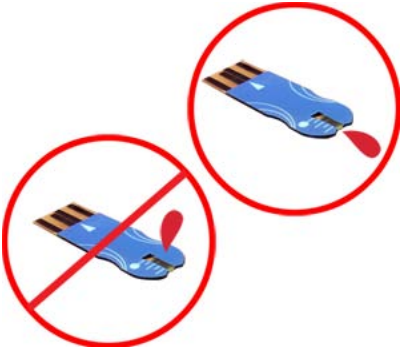
3. If you miss seeing the code number, take the test strip out and reinsert it into the meter. After LCD shows the code number, you will see the screen shown above.



4. When the blood drop flashes on the display, obtain a drop of blood from your fingertip.

5. Swab the blood collection area on your finger with an alcohol swab. Please wait at least 5 seconds until the intended area is dry and clean before sampling the blood.

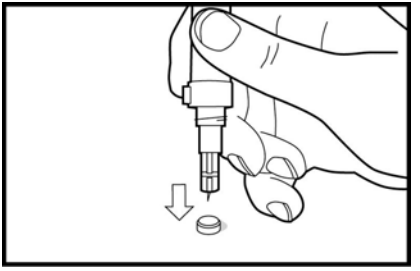
6. Place the lancing device against the pad of your finger. Press the trigger button to activate the lancing device.



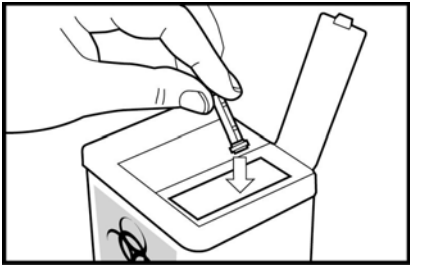
7. Gently squeeze your finger to assist the flow of blood. This helps you get a blood drop. Touch the drop to the tip of the transparent window of the test strip. **Do not put blood on top of the strip.** Be sure to get enough blood on the strip's reaction zone. Otherwise, an inaccurate reading may result.

8. The meter will beep when enough blood has entered the strip's reaction zone. The result will appear on the display after 5 seconds.

Discarding Used Lancets



1. Unscrew and remove the adjustable cap. Without touching the used lancet, stick the lancet tip into its protective cover. Grip the lancet carrier firmly and pull the lancet safely out.



2. Discard the used disposable lancet into an appropriate sharps or biohazard container.

Understanding Your Test Results

The EasyPlus Blood Glucose test strips are whole-blood referenced and calibrated for easier comparison to lab results. The normal fasting blood glucose range for an adult without diabetes is 70 – 110 mg/dL. Two hours after meals, the blood glucose range for an adult without diabetes is less than 140 mg/dL. For people with diabetes: please consult your doctor for the blood glucose range appropriate for you.

Unusual Test Results

If your blood glucose result doesn't match the way you feel, please follow these steps:

1. Run a control test, Chapter 2 "Control Solution Testing."
2. Repeat a blood glucose test, Chapter 3 "Testing Your Blood glucose."
3. If your blood glucose results still don't reflect the way you feel, call your doctor immediately.

Notes:

1. **Extremely high humidity may affect the test results. A relative humidity greater than 90% may cause inaccurate results.**
2. **A red blood cell count (Hematocrit) that is either very high (above 55%) or very low (below 30%) may not provide accurate results.**
3. **Some studies have shown that electromagnetic fields may affect results. Do not test near an operating microwave oven.**

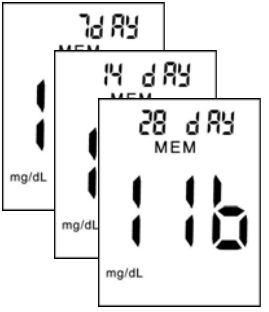
Chapter 4: Meter Memory, Setup
Memory, Storing Test Results

Your meter stores a maximum of 100 test results with the time and date of the test. You can review them at any time. When the memory is full, the oldest result is dropped as the newest is added, so it is very important to have the correct time and date set in the meter.

Notes:

1. **Do not change your therapy based on one individual result in memory.**
2. **The memory is not lost when you replace the battery. You do need to check that the time and date are still correct. See Section "Setting the time and date" in Chapter 1.**
3. **Once 100 results are in memory, adding a new result causes the oldest one to be deleted.**

Viewing & Deleting Test Results



1. Press and hold the “S” button until turning the meter on.
2. Press the “M” button to view the last test result.
3. Press “S” to view the previous results in order from the most recent to the oldest.
4. To delete a test result, Press and hold “M” for more than 3 seconds. The LCD will show “del”.
5. Continue pressing “M” without releasing, the currently viewed result will be erased.
6. Press “M” and release to review the average results for the last seven days
7. Press “S” to view averages for 14 or 28 days.
8. Press “M” to close the memory mode.

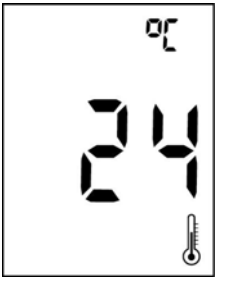
Meter Setup

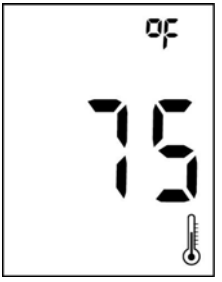
Using The Set Mode

By using the set mode, you can personalize your meter to suit your needs. Here are the features you can customize —

Time and Date — to set the time and date(see Chapter 1).
Thermometer — to show the current temperature.
Alarm — as a test reminder to test.
Beeper — to indicate a button has been pushed.
Clock — to indicate the time.

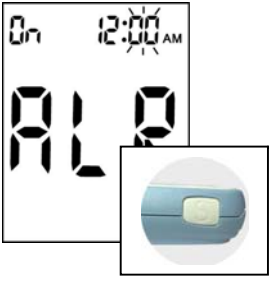
Setting The Thermometer





1. Press the ”S“ to turn the meter on.
2. Press the ”M“ and ”S“ buttons at the same time and hold for more than 3 seconds. The meter will go into Centigrade Thermometer Mode.
3. Press the ”S“ and the meter will change the temperature reading to Fahrenheit.
4. Press the ”S“ again and the meter will change to the Alarm Setting Mode.

Setting The Alarm



1. Press the “M“ to turn the alarm On or OFF. "On" or "OFF" indicators appear at the upper left corner of the LCD display screen.

2. Press the “S“ when the LCD displays "OFF” to change the meter alarm mode to Beep Setting Mode.

3. Press the “S“ when LCD displays "On", the first 2-digits of time (hour field) will flash. Press the “M” to adjust the hours.

4. If the time shows 12:00 AM, you must press the “M” 12 times to set at "PM". Press "S" to confirm.

5. The minute flashes. Press ”M” to adjust the minutes, and press “S” to confirm the setting.

Setting The Beeper For The Alarm

1. You will see the Beep Setting Mode after the Alarm Setting was confirmed. Press the “M “to switch the "On" "OFF" at the center of LCD.

2. Press the “S“ to confirm.

Setting The Clock

After confirming the beep setting, the meter will go to the Clock Mode.

1. You will see seconds being counted in the center of the display, 2-digits (month field) and 2-digits (day field) at the top left corner, 2-digits (hour field) and 2-digits (minute field) at the top right corner.

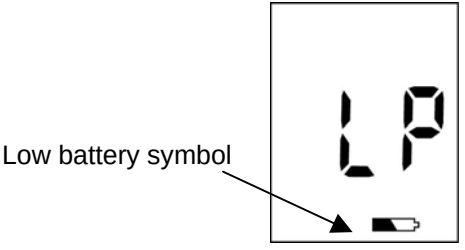
2. The meter alarm will sound when clock time matches the time set in the alarm mode. You can stop the alarm by pressing the “M“ or it will stop automatically after 10 seconds.

3. Press the “S“ to exit the “meter set mode”.

Chapter 5: Maintenance and Troubleshooting

Installing Batteries

The meter uses two alkaline 1.5V (AAA) batteries. Batteries will normally last for over 1000 tests. Other types of 1.5V (AAA) batteries are also acceptable, yet the capacity of test times may differ. Install the batteries when you first use the meter or replace with new batteries when the “LP” message and the low battery symbol appear on the LCD display.



The LCD display will show “no CODE” the first time batteries are installed. Please code your meter correctly.

Notes:

1. **The meter won’t delete earlier records after you replace batteries.**
2. **You should reset the time and date again after you replace the batteries.**
3. **5V (AAA) x 2 batteries is available in shops. You may take the old batteries with you for replacement.**
4. **Remove batteries when you will not be using the meter for one month or more.**

Cleaning Your Meter

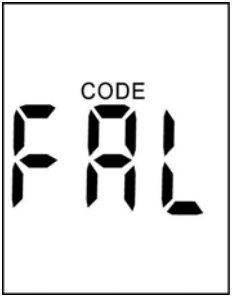
- Caring for your EasyPlus SMBG system does not require special cleaning. Please keep the meter free of dirt, dust, bloodstain, and water stains.
- To clean your meter, wipe the surface with a soft cloth dampened with water and mild detergent. Do not use alcohol or another solvent to clean your meters.
- Do not get any moistures, blood or control solution inside the meters through the strip connector.
- Do not spray cleaning solution on the meter or immerse it in any liquid.

Cleaning Your Lancing Device

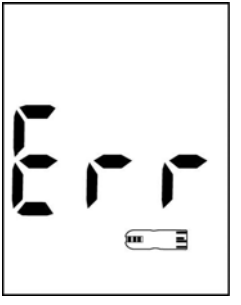
- To clean the lancing device, wipe them with a soft cloth dampened with water and mild detergent. **DO NOT** place the entire device under water
- To disinfect the cap after cleaning by placing it in 70% rubbing alcohol for 10 minutes. Allow the cap to air-dry after disinfecting.

Screen Messages And Troubleshooting

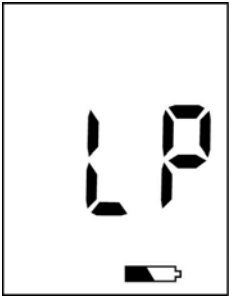
Never make treatment decisions based on an error message. If you have any concerns, call our **Customer Service Toll-Free: 1-888-216-5888**



Code transmission failure
Action: Re-insert the code card. If “FAL” appears consistently, contact local dealer for repair.

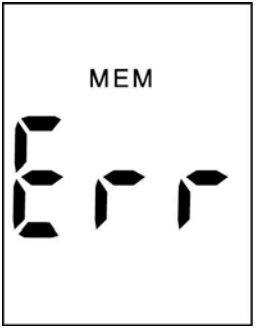


Humidified strips
Action: Replace with a new strip.

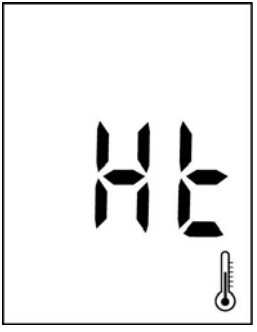


Low power
Action: Replace with new batteries.

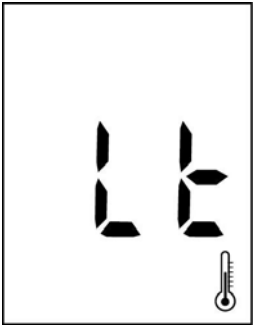
System fault
Action: Replace the batteries first. If 001 ERROR appears again, contact your local dealer for repair.



System fault
Action: Replace the batteries first. If Err appears again, contact your local dealer for repair.



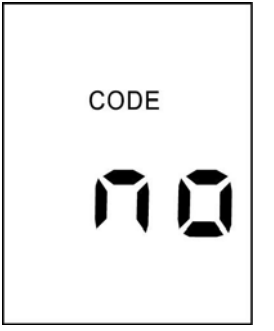
The “Ht” and thermometer icon appears. Temperature is too high, outside the required range of 50°F ~104°F (10°C ~40°C). This alerts users that an incorrect result may occur if the test continues.
Action: Relocate the meter to a location with temperature between 50°F ~104°F (10°C ~40°C).



The “Lt” and thermometer icon appears. Temperature is too low, outside the required range of 50°F ~104°F (10°C ~40°C). This alerts users that an incorrect result may occur if the test continues.
Action: Relocate the meter to a temperature between 50°F ~104°F (10°C ~40°C).

Test result is higher than 550 mg/dL.
Action: Test again. If the result is still the same, please contact your healthcare professional.

The test result is lower than 30 mg/dL.
Action: Test again. If the result is still the same, please contact your healthcare professional.



First time installation of batteries and the meter has not yet been coded.
Action: Code your meter.

Chapter 6: Technical Information
Specifications

Brand name		EasyPlus Blood Glucose Meter
Range		30~550 mg/dL
Response time		5 seconds
Memory sets		100 test results
Operating condition	Temp.	50°F ~104°F (10°C ~40°C)
	Relative Humidity	R.H. ≦ 90%
Blood sample		≧2.0 μL
		Fresh fingertip blood
Hematocrit (Hct)		30~55%
Power		2 Alkaline 1.5V (AAA)
Battery life		Over 1000 tests
Display dimension		LCD (40×32 mm)
Device dimension H×W×D (mm)		82.5×51×19(mm)
Weight		45.5 grams w/o batteries
Principles		Electrochemical biosensor technology

Comparing Your Meter Result To A Lab Result

If you want to compare your meter result to the lab result, you must be fasting. Bring your meter to the doctor's office, and test yourself by fingertip within five minutes of having blood drawn from your arm by a healthcare professional. Keep in mind that the lab could use different technology than EasyPlus blood glucose meter, and that blood glucose meters for self testing generally read somewhat lower or higher than the lab result.

For accuracy and precision data and for important information on limitations, see the instructions that come with your test strips.

Device Information

EasyPlus SMBG System,
EasyPlus Blood Glucose Test Strips,
EasyPlus Blood Glucose Meter.
GlucoManager Software Set

Manufacturer:
EPS BIO TECHNOLOGY CORP.
2F, No.49-2, Lane 2, Guang-Fu Rd., Sec. 2, Hsinchu City, Taiwan 300
TEL：+886-3-5752522　FAX：+886-3-5752552
E-mail：info@epsbio.com.tw　http://www.epsbio.com.tw

Lancing Device
Meets the requirements of MDD 93/42/EEC
Manufacturer:
PALCO LAB. INC.
8030 Soquel Avenue Suite 104 Santa Cruz, CA　95062-2032 USA
TEL: 831-476-3151, 800-346-4488　FAX: 831-476-1114
E-mail: info@palcolabs.com

Lancet
Meets the requirements of MDD 93/42/EEC
Manufacturer:
SAE HAN MEDICAL CORP.
700-113 PUB GOT-DONG, IL SAN-GU, GOYANG-CITY, KYUNGGI-DO, KOREA
TEL: 82-31-923-4330 FAX: 82-31-923-4331
E-mail: saehan@saehanmed.com

Additional Supplies

EasyPlus Glucose Normal Control Solution
GlucoManager Software Set

Warranty

EPS warrants the original purchaser for a period of 5 years from the date of purchase. This means during the warranty period if your Self-Monitoring Blood Glucose System does not work for any reason (other than obvious abuse), EPS will replace it with a new system or an equivalent product free of charge.

Part No.718009000 Rev.A01-082206 Reference No.EPS04014